

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

cation of: Stephen A. Tarin Confirmation No.:

7914

Serial No.:

10/629,810

Art Unit:

2168

Filed:

July 28, 2003

Examiner:

Dwivedi, Mahesh H.

For:

VALUE-INSTANCE-

Attorney Docket

8676-042

CONNECTIVITY COMPUTER-

No.:

(909537-999037)

IMPLEMENTED DATABASE

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure provisions of 37 C.F.R. §1.56, there is hereby provided certain information which the Examiner may consider material to the examination of the subject U.S. patent application. It is requested that the Examiner make this information of record if it is deemed material to the examination of the application.

- Enclosures accompanying this Information Disclosure Statement are: 1.
  - A list of all patents, publications, applications, or other information submitted for 1a. consideration by the office.
  - 1b. A legible copy of:

$\square$	Each publication	or that portion	which caused	l it to be listed	l on the PTO-1449;

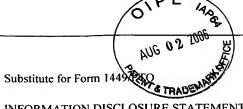
- For each cited pending unpublished U.S. application, the application specification including the claims, and any drawing of the application, or portion of the application which caused it to be listed on the PTO-1449 including any claims directed to that portion that have been checked to be unavailable at the USPTO's private PAIR system;
- An English language copy of search report(s) from a counterpart foreign application or PCT International Search Report;
- Explanations of relevancy (ATTACHMENT 1(d), hereto) or English language abstracts of the non-English language publications;
- All other information or portion which caused it to be listed on the PTO-1449.
- Pursuant to 37 C.F.R. § 1.98(a)(2)(ii), copies of the cited U.S. patents and U.S. lc. patent application publications are not submitted herewith unless required by the office.
- Pursuant to 1287 OG 163, copies of cited pending unpublished applications that 1d. are available at the USPTO's private PAIR system are not submitted herewith.
- This Information Disclosure Statement is filed under 37 C.F.R. §1.97(b): 2.

180.00

		Within three months of the filing date of a national application other than a continued prosecution application under §1.53(d);
		Within three months of the date of entry of the national stage as set forth in §1.491 in an international application;
		Before the mailing of the first Office action on the merits;
		Before the mailing of a first Office action after the filing of a request for continued examination under §1.114.
3.	under 3	This Information Disclosure Statement is filed under 37 C.F.R. §1.97(c) after the specified in 37 C.F.R §1.97(b), but before the mailing date of any of a final action 37 C.F.R. §1.113, a notice of allowance under 37 C.F.R. §1.311 or an action that ise closes prosecution in the application.
		(Check either Item 3a or 3b)
	3a.	The Certification Statement in Item 5 below is applicable. Accordingly, no fee is required.
	3b.	The \$180.00 fee set forth in 37 C.F.R. §1.17(p) in accordance with 37 C.F.R. §1.97(c) is:
		<ul><li>☐ enclosed.</li><li>☒ to be charged to Jones Day Deposit Account No. 50-3013.</li></ul>
		(Item 3b to be checked if any reference known for more than 3 months)
4.	☐ period	This Information Disclosure Statement is filed under 37 C.F.R. §1.97(d) after the specified in 37 C.F.R. §1.97(c), but on or before the date of payment of the issue fee.
	The Co	ertification Statement in Item 5 below is applicable.
		The \$180.00 fee set forth in 37 C.F.R. §1.17(p) is:  — enclosed.  — to be charged to Jones Day Deposit Account No. 50-3013.
5.	П	Certification Statement (applicable if Item 3a or Item 4 is checked):
J.		(Check either Item 5a or 5b)
	_	
	5a.	In accordance with 37 C.F.R. §1.97(e)(1), it is certified that each item of information contained in this Information Disclosure Statement was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement.
	5b.	Each item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart application, and the communication was not <b>received</b> by any individual designated in 37 C.F.R. §1.56(c) more than thirty days prior to the filing of this information disclosure statement.
	5c.	Pursuant to 37 C.F.R. §1.704(d), each item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart application, and the communication was not received by any individual designated in 37 C.F.R. §1.56(c) more than thirty days prior to the filing of this information disclosure statement.

6.	$\boxtimes$	This application is a continuation application under 37 C.F.R. §1.53(b) or (d).
		(Check appropriate Items 6a, 6b and/or 6c)
	6a.	☐ A Petition to Withdraw from issue under 37 C.F.R. §1.313(b)(5) is concurrently filed herewith.
	6b.	Copies of publications C02-C15 listed on Form PTO-1449 from prior application Serial No. 09/112,078, filed on July 8, 1998, now U.S. Patent No. 6,009,432, of which this application claims priority under 35 U.S.C. §120, are not being submitted pursuant to 37 C.F.R. §1.98(d).
	6c.	□ Copies of the publication C01, C16-C21 listed on Form PTO-1449 were not previously cited in any applications of which this application claims priority under 35 U.S.C. §120, and are provided herewith.
7.		This is a Supplemental Information Disclosure Statement. (Check Item 7a)
	7a.	This Supplemental Information Disclosure Statement under 37 C.F.R. §1.97(f) supplements the Information Disclosure Statement filed on . A bona fide attempt was made to comply with 37 C.F.R. §1.98, but inadvertent omissions were made. These omissions have been corrected herein. Accordingly, additional time is requested so that this Supplemental Information Disclosure Statement can be considered as if properly filed on .
8.	unders	In accordance with 37 C.F.R. §1.98, a concise explanation of what is presently tood to be the relevance of each non-English language publication is:
		(Check Item 8a, 8b, or 8c)
	8a.	Satisfied because all non-English language publications were cited on the enclosed English language copy of the PCT International Search Report or the search report from a counterpart foreign application indicating the degree of relevance found by the foreign office.
	8b.	Set forth in the application.
	8c.	Enclosed as an attachment hereto.
9.		The Commissioner is authorized to charge any additional fee required or credit any yment for this Information Disclosure Statement and/or Petition to Jones Day Deposit nt No. 50-3013.
10.	(other	No admission is made that the information cited in this Statement is, or is considered material to patentability and no representation is made that a search has been made than a search report of a foreign counterpart application or PCT International Search if submitted herewith). 37 C.F.R. §§1.97(g) and (h).
Date:	Augu	st 2, 2006  Respectfully submitted,  38,051  Ognjan V. Shentov  JONES DAY  Respectfully submitted,  (Reg. No.)
		222 East 41st Street New York, New York 10017 (212) 326-3939

7914



INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)

ATTY DOCKET NO.

8676-042

APPLICATION NO.

10/629,810

APPLICANT:

Stephen A. Tarin

FILING DATE:

ART UNIT: CONF. NO.:

2168

## **U.S. PATENT DOCUMENTS**

July 28, 2003

EXAMINER'S INITIALS*	ì	DOCUMENT NUMBER	DATE MM/DD/YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A01	US 5,379,422	01/03/1995	Antoshenkov	·
	A02	US 5,388,259	02/07/1995	Fleischman, et al.	
	A03	US 5,504,885	04/02/1996	Alashqur	
	A04	US 5,542,073	07/30/1996	Schiefer, et al.	
	A05	US 5,734,887	03/31/1998	Kingberg, et al.	
	A06	US 5,761,652	06/02/1998	Wu, et al.	
	A07	US 5,787,279	07/28/1998	Rigoutsos	
	A08	US 5,797,000	08/18/1998	Bhattacharya, et al.	
	A09	US 5,799,312	08/25/1998	Rigoutsos	
	A10	US 5,802,525	09/01/1998	Rigoutsos	
	A11	US 5,855,019	12/29/1998	Bhargava, et al.	
	A12	US 5,956,706	09/21/1999	Carey, et al.	
	A13	US 5,963,936	10/05/1999	Cochrane, et al.	
	A14	US 6,088,691	07/11/2000	Bhargava, et al.	
	A15	US 6,138,111	10/24/2000	Krishna	
	A16	US 6,199,099	03/06/2001	Gershman, et al.	57
	A17	US 6,330,554	12/11/2001	Altschuler, et al.	
	A18	US 6,374,263	04/16/2002	Bunger, et al.	
	A19	US 6,484,179	11/19/2002	Roccaforte	
	A20	US 6,272,487	8/7/2001	Beavin, et al.	
	A21	US 5,794,228	8/11/1998	French, et al.	
	A22	US 5,701,453	12/23/1997	Maloney, et al.	
	A23	US 5,819,086	10/6/1998	Kroenke	
_ :	A24	US 6,006,219	12/21/1999	Rothschild	

			FOREIGN P	ATENT DOCUMENTS			
EXAMINER'S INITIALS*		Country Code, Number, Kind of Code (if known)	DATE MM/DD/YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	TRANSL	ATION
						YES	NO
	B01						
	B02						

<b>EXAMINER</b>
NVID-1632050vI

DATE CONSIDERED

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

	ATTY DOCKET NO.	APPLICATION NO.		
Substitute for Form 1449/PTO	8676-042	10/629,810		
Substitute for Form 1447/1 10	APPLICANT:			
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)	Stephen A. Tarin			
(Ose several sheets if necessary)	FILING DATE:	ART UNIT: CONF. NO.:		
	July 28, 2003	2168 7914		

NON PATENT LITERATURE DOCUMENTS (include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, etc.,), date, page(s)s, volume, publisher, city and/or country where published, etc.) **EXAMINER'S** INITIALS\* Abdelguerfi, M et al., "Computer Complexity of Sorting and Joining Relations with Duplicates", IEEE Transaction on C01 Knowledge And Data Engineering, Volume 3, No. 4, December 1991, Pages 496-503 Fiat et al., 1991, "An Implicit Data Structure for Searching a Multikey Table in Logarithmic Time," Journal of C02 Computer and System Sciences vol. 43, 406-424 Fiat et al., 1988, "Storing and Searching a Multikey Table," ACM, pp. 344-353 C03 Knuth, D. E., 1998, "The Art of Computer Programming," 2d Ed., vol. 3, 5, 584, Addison-Wesley Publishing C04 Company Lehman et al., August, 1986, "A Study of Index Structures for Main Memory Database Management Systems," Proc. C05 12th Int'l Conf., Very Large Data Bases, Kyoto, Japan, pp. 294-303 Lehman et al., 1986, "Query Processing in Main Memory Database Management Systems," ACM, pp. 239-250 C06 Munro, 1987, "Searching a Two Key Table Under a Single Key," ACM pp. 383-387 C07 Nevergelt et al., 1984, "The Grid File: An Adaptable, Symmetric Multikey File Structure," ACM, pp. 108-124 C08 Yao, July 1981, "Should Tables Be Sorted?," Journal of the Assoc. of Computing Machinery, vol. 28, no. 3, pp. 615-C09 Babb,"Implementing a Relational Database by Means of Specialized Hardware," ACM Transactions on Database C10 Systems, vol. 4, no.1, March 1979, pp. 1-29 Goldstein et al., "The MacAIMS Data Management System," Record of the 1970 ACM SICFIDET Workshop on Data CII Description and Access, Nov. 15-16, 1970, pp. 201-229 Goldstein et al, "Database Management with Sequence Trees and Tokens," IEEE Transactions on Knowledge and C12 Data Engineering, vol. 9, no. 1, Jan-Feb 1997, pp. 186-192 Sharman, "Update-By-Dialogue: An Interactive Approach to Database Modification," ACM SIGMOD International C13 Conference on Management of Data, Toronto, Canada, Aug. 3-5, 1977 Strnad, "The Relational Approach to the Management of Data Bases," Information Processing 71, Proc. Of IFIP C14 Congress 71, vol. 2, Ljubljana, Yugoslavia, Aug. 23-28, 1971, published 1972, pp. 901-904 Titman, "An Experimental Data Base System Using Binary Relations," Database Management, North-Holland C15 Publishing Company, 1974, pp. 351-360 Chinese Patent Application No. 99810695.X First Office Action dated July 12, 2002 C16 Chinese Patent Application No. 99810695.X Second Office Action dated August 5, 2005 C17 PCT/US99/15431 International Search Report dated October 22, 1999 C18 PCT/US99/15431 International Preliminary Examination Report dated March 29, 2000 C19 PCT/US01/47678 International Search Report dated March 29, 2002 C20 PCT/US01/47678 International Preliminary Examination Report dated August 9, 2002 C21

NYJD-1632050v1	
EXAMINER	DATE CONSIDERED
TEVANISTED. In third if a Common considered subother of	as not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.